



**USIC** is a non-profit association of American companies and universities who are active partners in our nation's long-term nonproliferation efforts with the former Soviet Union.

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## In today's edition:

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### President's Report: Optimism and Success

Things are starting to happen again in Washington. Earlier this month, President Bush met with Russian President Putin for the first time. The overall atmosphere of the meeting was positive and marked by a pragmatic mood of trying to do business with one another. When Bush and Putin meet again in mid-July in Genoa, the Administration's review of Russian assistance and cooperation programs should be complete. I have every reason to believe that the importance of the Initiatives for Proliferation Prevention (IPP) program will be confirmed. Just last week, the House Energy & Water Appropriations Subcommittee approved \$30M for IPP in FY02 – well above the \$22.5M originally proposed by the Administration. We expect strong support from the Senate as well. Stay tuned.



**VICTOR E. ALESSI**  
President & CEO

This good news is a tribute to our member companies. Many USIC members have crossed the threshold to success: they are entering the commercialization phase of their IPP projects and are attracting outside financing to bring their products to market. In this vein, Senator Pete Domenici recently hosted a briefing in the prestigious Caucus Room in the Russell Senate Office Building to announce final steps towards commercialization of a unique wheel-chair seat cushion that promises to prevent and heal pressure ulcers. IPP partners Numotech, Inc., Sandia National Labs and SPEKTR-Conversion expect to start production by early next year. M.R. Beal, a New York investment bank, has already raised millions in capital financing for this product. (See below for more details.)

USIC is exploring a number of new ways to bring investment capital to our members' projects, in order to stimulate moving technologies from engineering to production and marketing. Now that USIC is considered a success in supporting the IPP program and its important goal of creating new high tech jobs in the U.S. and the former Soviet Union, we are finding that obstacles to new initiatives are being pushed aside. In the end, this success reflects the competence of our member companies, who are and will continue to be the engine for flourishing commercialization in the former Soviet Union.

### IPP Director's Report: ISTC and STCU Agreements Signed

IPP has signed the first project agreements to use as payroll agents the International Science and Technology Center (ISTC) in Russia and Kazakhstan, and the Science and Technology Center Ukraine (STCU) for that country. Under this arrangement, IPP payments will be made to individual Russians, Ukrainians, and Kazakhstanis free of all host country taxes, duties and social charges. ISTC and STCU provide redundancy, along with the U.S. Civilian Research and Development Center's (CRDF's) proven performance as IPP's payroll agent in Russia and Ukraine. This is an important step forward, because it means that IPP's NIS taxation problems are behind it, and IPP is



**PETER C. GREEN**  
Deputy Director

assured that it will be in full compliance with Congressional intent regarding avoidance of NIS taxes on program funds. It also means that IPP has restarted in Kazakhstan. Not entirely coincidentally, several major U.S. industry cost-shared projects have just been approved or else are in the final review process for Kazakhstan. I encourage national laboratories and USIC members to look closely at further opportunities in Kazakhstan and Ukraine, along with ongoing program interest in Russia.



*Pictured at the May 23 ISTC signing ceremony in Almaty, Kazakhstan are (l-r) Dr. David Ehst, Argonne National Lab, Chair of the IPP InterLab Board; Ms. Tatiana Baikova, ISTC, Moscow office; and Dr. Tlekkabul Ramazanov, Director, Kazakh State National University. [Photo courtesy of Dr. Vladimir Shestakov]*

### Promising New Medical Device Highlighted in Capitol Hill Briefing

On June 13, **Senator Pete Domenici (R-NM)** hosted a briefing in the Russell Senate Caucus Room to draw attention to a unique wheelchair seat cushion with potential for prevention and healing of pressure ulcers.

Pressure ulcers are the painful, expensive to treat and sometimes deadly consequence of immobility and poor circulation. Millions of people who are confined to bed or wheelchairs due to spinal cord injuries, diabetes, MS or other diseases are particularly susceptible to these sores.

The Senator welcomed special guests **Willie Shoemaker**, National Horse Racing Hall of Fame jockey, and **Joseph Alioto**, noted San Francisco attorney and co-founder of the Paralysis Project of America. Shoemaker, who became quadriplegic after an auto accident following his retirement from racing, joined Alioto in calling for speedy introduction of the cushion and for additional research into a cure for paralysis.

Originally developed by USIC member **Numotech, Inc.** and **Sandia National Laboratories**, the Generic Total Contact Seat (GTCS™) is FDA-approved as a Class II medical device. Through an IPP partnership with former weapons scientists at **SPEKTR-Conversion** in Snezhinsk, Russia (see next story) key components of the GTCS™ will be produced in Russia, with final assembly in New Mexico. Market introduction is expected in early 2002.



**Sen. Pete Domenici (R-NM)**



**Willie Shoemaker**

(Continued)

**General John Gordon**, Administrator of the DOE National Nuclear Security Administration (under which the IPP program is operated), hailed the project as an excellent example of the program goal to convert weapons technologies into peaceful products. Sandia VP and Deputy Director **Joan Woodard** described the close collaboration between Numotech and Sandia and the excitement of bringing SPEKTR- Conversion into that partnership.

Numotech is working closely with **M.R. Beal & Company**, a New York City firm specializing in investment banking, proprietary research and securities trading. M.R. Beal has already raised several million dollars to support commercialization of the GTCS™.



Joseph M. Alioto



*Following the June 13 briefing, Numotech CEO Robert Felton and SNL VP Joan Woodard signed the CRADA to launch production of the wheelchair cushion. Looking on (l-r) are Vic Alessi of USIC with Ken Baker and John Rooney of DOE-IPP.*



Gen. John A. Gordon

[\[link to Numotech poster\]](#)

### Kazakh Minister Meets with IPP-USIC

**Nuraly Bekturganov**, newly appointed Minister of Education and Science in the Republic of Kazakhstan, met with IPP and USIC representatives on May 10, 2001 for a briefing on IPP and other U.S.-Kazakhstani cooperative programs.

Mr. Bekturganov described the recent re-structuring of ministries by the Kazakhstani Government. The Ministry of Education and Science now has responsibility for the National Center for Biotechnology (including facilities at Stepnogorsk and Otar), in addition to other Kazakhstani scientific institutions such as the National Academy of Sciences and universities. As Minister, Mr. Bekturganov heads an inter-ministerial concurrence commission that reviews CRDF projects.

The Ministry of Energy and Mineral Resources, under the direction of **Vladimir Shkolnik**, supervises the National Nuclear Center and other nuclear industry facilities. Mr. Shkolnik leads the inter-ministerial concurrence commission charged with reviewing IPP and ISTC projects.

After an overview of the IPP program by Director **James Noble**, USIC members **Brian Frame**, **NUKEM**, and **Cornelius Milmoie**, **Global Nuclear Fuel – Americas** (a division of GE Power Systems) described their respective projects with Ulba Metallurgical Plant in Ust-Kamenogorsk. USIC Technology Commercialization Specialist **Gulbarshyn Bozheyeva** spoke about the probiotics project of **Wayne Farms, LLC** with the National Academic Center for Agrarian Research in Almaty. Also in attendance were **Daulet Absatov** of the Kazakhstani Embassy, **John Rooney** from DOE, and **Gary Tydings** from USIC.

## Ambassador Graham Named to USIC Board of Directors

Ambassador Thomas Graham, Jr., a senior U.S. diplomat involved in the negotiation of every major international arms control and nonproliferation agreement of the past 30 years, was named to the USIC Board of Directors in March 2001.

Now President of the [Lawyers Alliance for World Security \(LAWS\)](#), Amb. Graham played a major role in bringing about the indefinite extension of the Nuclear Nonproliferation Treaty, which has been termed one of the great accomplishments of the past decade. Nearly 180 states are party to this treaty.

*"I have admired the important and valuable work done by USIC for some time and I look forward very much to my service on the Board,"* says Amb. Graham, who will complete a three-year term of office ending in 2003. LAWS is an Associate Member of USIC.



Thomas Graham Jr.  
[\[Click to view bio\]](#)

## New USIC Members

### Five New Primary Members

[Archer Daniels Midland Company](#), headquartered in Decatur, IL, is one of the world's largest agricultural corporations. Through its network of over 205 domestic and internationally based plants, ADM processes 11 cereal grains and oilseeds into a multitude of products used for food, beverage, nutraceutical, industrial, and animal feed markets worldwide. ADM products help to meet the daily nutritional needs of over 130 million people. Working with **Pacific Northwest National Laboratory** and the **Institute of Genetics and Selection of Industrial Organisms (GosNII Genetika)** in Moscow, ADM is developing an IPP project to find new sources of lactic acid for use in global food and fibre processing industries.

[Brookhaven Technology Group, Inc.](#) designs and develops electron and ion beam equipment utilizing innovative approaches to improve performance, extend the limits and advance quality, safety and economics in medical, industrial and advanced research applications. The Nesconset, NY company will partner with **Brookhaven National Laboratory** and **Budker Institute of Nuclear Problems** in Novosibirsk, Russia on development of an accelerator system to produce epithermal neutrons for use in Boron Neutron Capture Therapy (BNCT). The project aims to improve performance of BNCT in clinical radiation of difficult-to-reach tumors.

[Cordin Company](#) of Salt Lake City, UT, has been manufacturing ultra high speed imaging systems for use in visualizing fast events for over 40 years. Cordin's high speed photography lines include: high speed rotating mirror and rotating drum mechanical cameras; intensified, gated CCD and rotating mirror digital cameras; and image converter streak cameras. Cordin is developing an IPP project with **Lawrence Livermore National Laboratory** and **Arzamas-16** in Sarov, Russia, to develop commercial applications for a unique Russian camera capable of capturing high-resolution infrared images in a 100 ns time frame. The Russian camera (called KIT-2F) is currently used as a scientific tool within Russian nuclear centers.

[Eaton Holdings Limited, Inc.](#) has interests in developing new products and technologies in four areas: the environment; medical research and applications; workplace safety; and new energy sources. The company, located in Annapolis, Missouri, is developing an energy-related IPP project proposal with **Sandia National Laboratories**.

[NEOGas, Ltd.](#), a new division of NEOppg, an independent energy services provider based in Houston, TX, is focusing on development of a unique patented method for efficiently transporting compressed natural gas from gas sources to stranded customers. NEOGas has signed onto a previously approved IPP project developed by **Maverix, Inc.** with **National Renewable Energy Laboratory** and **Arzamas-16** to retrofit a small natural gas vehicle fleet in the closed nuclear city of Sarov.



## Sandia Brings Together Russian and U.S. Partners

Leaders from the closed nuclear city of **Snezhinsk, Russia** and **SPEKTR- Conversion**, a private spin-off of Chelyabinsk-70, traveled to **Sandia National Laboratories** in late April for a series of working sessions with their USIC and SNL partners and other experts in technology, law and finance.

As described above, SPEKTR-Conversion is working with Numotech on a wheelchair cushion for prevention and treatment of pressure ulcers. SPEKTR-Conversion is also engaged in three other IPP projects with medical and humanitarian goals: a "smart" integrated lower limb prosthetic with **Seattle Orthopedic Group, Inc.**; an advanced electronic knee prosthesis with **Ohio Willow Wood**; and a robotic landmine detector utilizing the geological radar system developed by **Stolar Horizon, Inc.**

The Sandia meetings allowed the IPP partners to spend valuable in-person time to review technical issues, as well as to build greater understanding by the Russian partners of issues governing medical devices manufacturing and the intricacies involved in raising financial capital.

**W. Patrick Noonan**, legal counsel for Numotech, explained the structure and processes of the U.S. Food & Drug Administration, which oversees medical devices. **Fred Nelson** of Applied Quality Systems introduced the Russian partners to the ISO9000 regulations. Information on capital financing was presented by **Bernard Beal**, President of **M.R. Beal & Company**, a Wall Street investment banking firm.

This successful program may serve as a model for other national labs to sponsor a multi-IPP partner seminar on technical and financial issues related to commercialization.

For information, contact Sandia-IPP Program Manager **James L. Rea** at [jlrea@sandia.gov](mailto:jlrea@sandia.gov) or by calling 505-845-8728.



*At a press conference on Snezhinsk-U.S. partnerships are (l-r) Jim Tegnalia, SNL VP; Steven Kadner, USIC Board Chair; Bernard Beal, M.R. Beal & Company; Robert Felton, Numotech; Vladimir Klimenko, City of Snezhinsk Vice Mayor; Roman Khan, Interpreter; and Anatoli Ivanov, SPEKTR-Conversion Director.*



*With the Snezhinsk city flag as a backdrop, Margaret Olson, SNL Intelligent Systems & Robotics Manager, and Vladimir Klimenko, Snezhinsk Vice Mayor, celebrate U.S.-Russian partnerships.*



*Jim Cairns (r), Seattle Orthopedic Group president, poses with the SNL-SOGI team for the "smart" lower limb prosthetic. Shown are (l-r) Guy Houser, SOGI; Mark Vaughn, Diane Hurtado, and Margaret Olson of Sandia; and Ivan Sabel, Chairman & CEO of The Hanger Orthopedic Group, SOGI's parent company.*

## News From USIC Members

**Fenix Technology International** reports that its Russian partner, **UPEC Ltd.**, has signed a 1.5 million ruble contract to deliver the first industrial prototype of their Heavy Metals Remediation System to the Ural Optical Mechanical Plant, where it will be used to remove copper from wastewater discharged by the printed circuit boards fabrication shop. The market need for the System, developed with **Brookhaven National Laboratory**, is estimated at 300 units in the Sverdlovsk region alone.

**Advanced Technologies Industries, Inc.**, a USIC member participating in the **Nuclear Cities Initiatives (NCI)** program, recently announced it will form an Incubator/Technology Park in Zheleznogorsk (formerly known as Krasnoyarsk-26), one of the “closed cities” of the Former Soviet Union. ATI is partnering with **NIFTI**, the Research Institute of Physics and Engineering. NIFTI was formed in 1991 when three departments of Krasnoyarsk State University were transformed for the purpose of developing defense-related technologies. The joint ATI-NIFTI “International Centre of Advanced Technologies” will focus on: Nuclear Waste Management; Superconductivity; Environmental Pollution; Life Sciences; Fire protection materials; and Aluminum production and environmental by-product technologies.

[USIC members interested in developing NCI projects are encouraged to contact NCI Director **William Desmond**, [william.desmond@hq.doe.gov](mailto:william.desmond@hq.doe.gov) or by calling 202-586-1007]

[\[Click here to see ATI news release\]](#)

## Alessi Addresses Conferences

On June 18-19, USIC President **Vic Alessi** and new USIC board member **Tom Graham** were among several presenters at the annual meeting of the American Nuclear Society in Milwaukee. Alessi spoke on “U.S.-Russian Nuclear Security Cooperation: Navigating the Present Realities.”

“Arms Control, Nonproliferation and the National Laboratories” was the topic of Alessi’s invited seminar for **Pacific Northwest National Laboratory** staff on June 15. Alessi focused on specifics surrounding the IPP program and the role USIC plays.

It was standing room only at **Lawrence Livermore National Laboratory** on May 14 when Alessi spoke on “Arms Control and Nonproliferation at the New Millennium: What remains to be done with the post-Cold War Legacy?” This address was part of the colloquia series offered by the Nonproliferation, Arms Control and International Security Directorate at LLNL.

## Technology Commercialization Activities

USIC Director of Technology Commercialization **Frank Lemkey**, who is now working quarter-time with USIC, has been concentrating on selected IPP projects with **Oak Ridge National Laboratory**, the **National Renewable Energy Laboratory** and **Sandia National Laboratories**. In May, Lemkey met with ISTC and STCU representatives in Russia and Ukraine to explore how to maximize selection of technologies and technical teams at institutes and laboratories in those countries.

**Gulbarshyn Bozheyeva**, Technology Commercialization Specialist, is participating in the June 28 IPP Topical Workshop on Medical Projects at **Lawrence Berkeley National Laboratory**. This workshop will enable PIs with NIS medical projects to network and to identify common problems that may be slowing or inhibiting commercialization or business formation in the NIS and with U.S. industrial partners. The ideal outcome will be better-designed IPP projects.

On June 20, Bozheyeva represented USIC at a seminar promoting Russian science and technology business opportunities. Several dozen U.S. businesses from Pennsylvania, New Jersey and New York attended the half-day program, which was co-sponsored by the Pennsylvania-Russia Business Council, the Partners Program of the U.S. Department of State, the New Jersey Technology Council and USIC; and hosted by the Princeton University School of Engineering.

## 2001 Annual Meeting Set for November 1

Mark your calendars! **Thursday, November 1, 2001** has been selected for the USIC Annual Meeting and Chairman's Reception. USIC General Counsel **Charles Peterson** will host the Annual Meeting at the conference center in the Washington, DC law offices of **Shaw Pittman**. Mr. Peterson recently joined Shaw Pittman as a partner in their Energy Practice Group.

Details regarding the program agenda, registration, and recommendations of local area hotels will be posted shortly on the USIC web site. The USIC Board of Directors will meet on Friday, November 2.

## USIC Member Survey Underway

USIC primary members are being surveyed to measure satisfaction with the current IPP-USIC program and to determine possible future services. Results from this confidential survey will be published in a future issue of E-NOTES.

Primary members who did not receive the questionnaire are asked to contact **Joan Furlong** at [jfurlong@usic.net](mailto:jfurlong@usic.net).  
**Completed surveys are due in the USIC office by July 6.**

## Summer Intern

USIC's summer intern, **Alina Forak**, is starting her senior year at George Mason University where she is studying Government & International Politics and Russian Studies. Alina moved to the U.S. in 1996, coming with her family from Krasnodar, Russia. She is assisting with membership and communications projects.



**Alina Forak**

## Russia's Middle Class: Two Articles

**Trevor Gunn**, Deputy Director of the **BISNIS** program at the U.S. Department of Commerce, recently circulated two interesting articles on the status of the Russian middle class. Following is his e-mail message:

*"A profound understanding of 'what is going on' with the Russian Middle Class is vital to determining at what pace our US firms should move forward in Russia. Perhaps there was nothing more bemoaned than the 'middle class' demise" during the crisis of Fall 1998. Whatever your definition (and there are many), it looks like the Middle Class is 'back.' Keeping with BISNIS' attempts to stimulate the debate and for some of our clients to get better analysis on 'mission-critical' trends in Russia, I am passing on two articles written by my boss at my other job, in the School of Foreign Service/CERES, Georgetown University, where I serve as Adjunct Professor."*

[\[Click here for article 1\]](#)

[\[Click here for article 2\]](#)

Comments on E-NOTES or the  
USIC web site?

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